Accelerating Deep Retrofits:

CAGBC

A YEAR OF INSIGHTS ON PROGRESS AND BARRIERS

Lessons from Year One of the Purpose Retrofit Accelerator.

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About Purpose Building

Purpose Building is an employee-owned Canadian company working exclusively on accelerating real estate to planet-positive pathways. We draw out the best of everybody to create a better future through healthy, circular, low-carbon, financially successful communities and buildings. Learn more at **purposebuilding.ca**

About the Canada Green Building Council

The Canada Green Building Council (CAGBC) provides solutions and services the building sector needs to construct and manage buildings that are easier on resources, healthier for people, resilient and cost-effective. We work with the sector to influence standards, develop best practices, and educate the market on the benefits of green buildings. For more information visit **cagbc.org**

About Natural Resources Canada's Deep Retrofit Accelerator Initiative

The Deep Retrofit Accelerator Initiative (DRAI) by Natural Resources Canada funds retrofit accelerator organisations that help building owners develop deep-retrofit projects, and supports capacity-building across Canada's commercial, institutional and mid/high-rise multi-unit residential building sectors.

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Executive Summary

Canada's large-building sector is at an inflection point. Climate risk, rising operating costs, evolving investor expectations, and tightening policy signals are reshaping perceptions of long-term asset performance. Deep energy and carbon retrofits are increasingly central to managing these pressures — not as a future ambition, but as a near-term business imperative.

Insights from the first year of the Purpose Retrofit Accelerator show that momentum is building among forward-thinking leaders. Market familiarity with deep retrofits is growing, confidence is increasing, and more owners are moving from intention to planning and early implementation. Transition plans developed through the Accelerator demonstrate that meaningful emissions reductions — on the order of 40 percent by 2030 — are achievable today for some buildings, while positioning these assets for full decarbonization by mid-century.

At the same time, preliminary findings underscore several clear messages: Action by the leading few is not enough – the vast majority of buildings must transition. Incremental or "shallow" upgrades will not deliver the scale or speed of reductions required. Deep retrofits must address major building systems and be integrated with capital-planning cycles to unlock their value.

Cost transparency, credible benchmarks, and structured planning processes are proving critical in helping owners move projects forward despite challenging financial conditions. Buildings that remain energy-and emissions-intensive face growing exposure to volatile utility costs, insurance premiums, regulatory risk, and tenant attrition. By contrast, deep retrofits can improve long-term affordability by reducing operating costs, strengthening resilience, and improving access to financing and capital — benefits that are not yet fully reflected in current valuation practices.

Looking ahead, accelerating deep retrofits will require continued leadership from building owners, alongside stronger alignment across the ecosystem. Incentives, financing tools, and valuation frameworks must evolve to recognize the full performance and risk-management benefits of low-carbon buildings. The Purpose Retrofit Accelerator will continue to support this shift by advancing projects, sharing evidence, and building a clearer, more actionable picture of what it takes to decarbonize Canada's existing buildings at scale.

Owners, managers, lenders, and policymakers all have a role to play in turning proven plans into delivered projects — and in ensuring Canada's building stock remains competitive and resilient for a low-carbon future. We invite them to join us in this work.

Accelerating Deep Retrofits: Meeting Current Needs, Anticipating Future Risk

Building owners and operators are approaching the retrofit conversation from a variety of perspectives. Some see opportunities to reduce operational costs while improving tenant attraction and retention — supporting occupancy and long-term asset value. Others aim to reduce various financial, operational, and reputational risks that they increasingly associate with business as usual.

For example, as extreme heat, blasts of heavy precipitation, and rising insurance costs take hold, real estate appraisers are likely to place greater weight on climate resilience — including energy and carbon performance — in their valuations.[1]

Many building owners are cognizant of these opportunities and risks and want to pursue deep retrofits. But significant barriers remain.

In April 2024, Purpose launched The Purpose Retrofit Accelerator, partnering with the Canada Green Building Council (CAGBC) on market engagement. With funding from Natural Resources Canada's Deep Retrofit Accelerator Initiative, the program is helping owners and managers of large buildings plan, finance, and implement energy and carbon retrofits.

The Accelerator is engaging and supporting those doing the hard work, and sharing lessons learned so other owners and operators can advance their projects.

What they're saying:

> "The Purpose Building Retrofit Accelerator has played a critical role in supporting our net zero pathway. Purpose Building and Recursive Advisors helped us develop a robust Scope 3 accounting methodology, a forward-looking GHG forecasting model, and a risk sensitivity analysis. Their expertise enabled data-driven decision-making and laid a strong foundation for target setting."

— Ruth Legg
Vice President, Environment, Social & Governance, Concert Properties

This report seeks to share insights from this early leadership, to catalyze broader action. It captures learnings and initial outcomes from the Accelerator's first year, which ran from April 1, 2024, to March 31, 2025, as well as a market sounding that immediately followed in the spring of 2025. Its insights not only reflect participant experiences but also illuminates the conditions needed to accelerate retrofit adoption across Canada.

[1] Appraisal Institute of Canada & Intact Centre on Climate Adaptation, 2023. https://www.aicanada.ca/wp-content/uploads/CPV2-23-Integrating_Climate_Risks-English.pdf

How the Purpose Retrofit Accelerator Supports Decarbonization

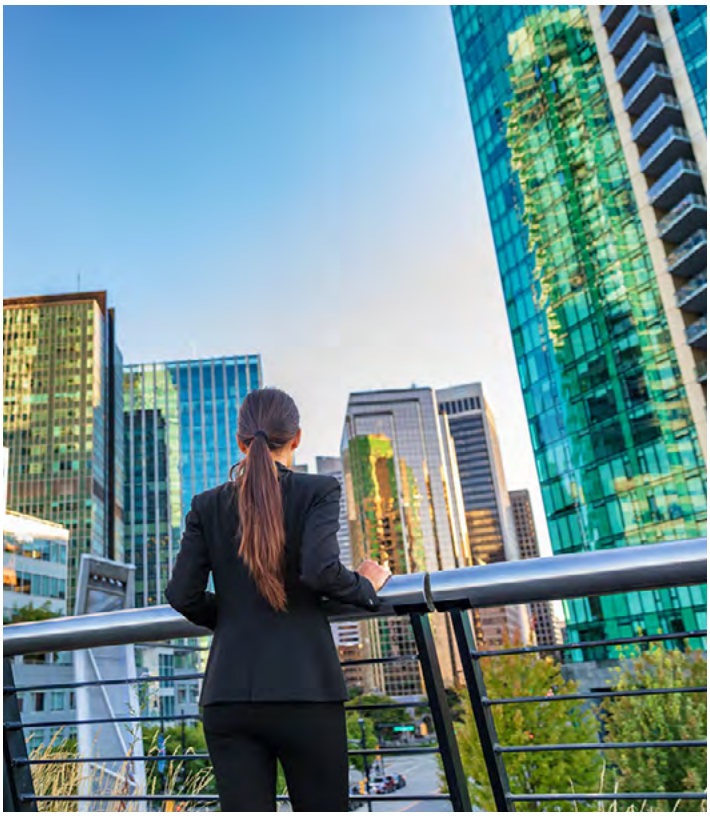
The Canadian market does not yet have the conditions required for deep carbon retrofits to occur at scale. During its first year, the Purpose Retrofit Accelerator used Deep Retrofit Accelerator Initiative (DRAI) funding to help building owners and managers advance the planning and early execution of retrofit projects. The program provided technical, financial, and organizational support that drew on Purpose decades of experience to build confident teams able to deliver outcomes well beyond what they thought possible, including assessing, planning, implementing, and scaling retrofits.

In its inaugural year, the Accelerator worked with more than 1,700 buildings, identifying over 350,000 tonnes of potential annual greenhouse gas reductions across participating portfolios. Non-prescriptive support was provided for any step in the retrofit process and was tailored to each organization. Depending on the situation, this support included:

- Developing portfolio level plans and processes that help prioritize investments.
- Evaluating new technologies, software tools, and delivery approaches.
- Creating asset specific zero carbon transition strategies.
- Assessing capital and operating cost implications.
- Strengthening internal business cases and approval pathways.
- Coordinating design and implementation activities.
- Monitoring progress and refining strategies post retrofit.

Through this work, the program helped owners move from intention to action, contributing early evidence about the types of assistance needed to advance deep retrofit activity across Canada.

Figure 1 visualizes the deep retrofit journey that many owners travel, highlighting progress to-date from the Purpose Retrofit Accelerator. For program details, please see **purposebuilding.ca/purpose-retrofit-accelerator** or contact **Purpose** directly.



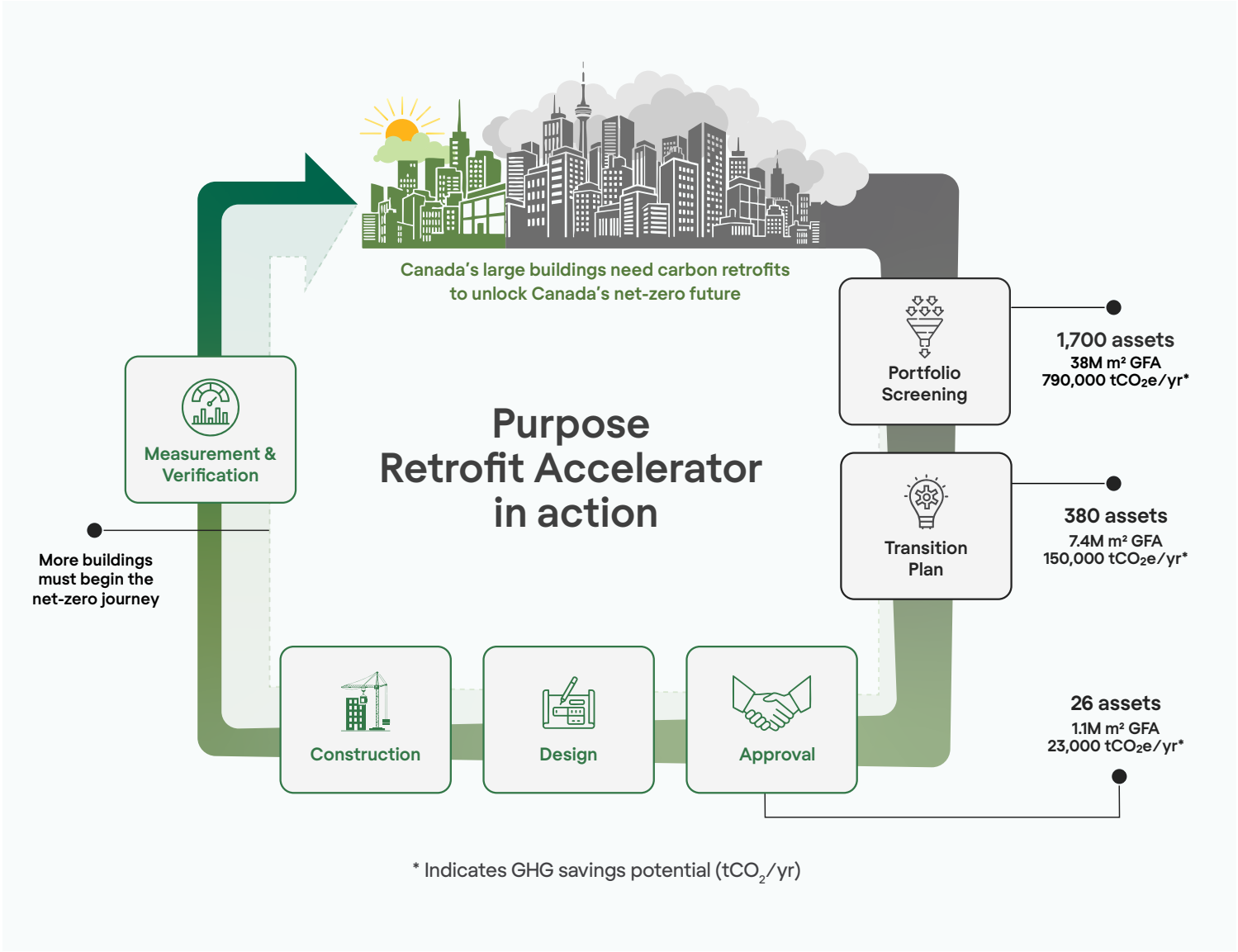


Figure 1: The Purpose Retrofit Accelerator Pathway

What they're saying:

"The Purpose Retrofit Accelerator has enabled GWLRA to cost-effectively analyze deep carbon retrofit strategies across our portfolio. Clear, action-oriented recommendations from Purpose Building — and dedicated funding from NRCan's Deep Retrofit Accelerator Initiative — have empowered our property teams to proactively plan for equipment renewals and tailor our decarbonization pathways. The incentives have reduced the cost burden on our clients, advanced our sustainability program, and accelerated climate action."

— Marc Pietrobon
Director, Corporate Sustainability, GWL Realty Advisors

Emerging Observations

The Market Sentiment on Decarbonization

In 2024, then again in the spring of 2025, CAGBC surveyed the market to understand the industry's level of decarbonization experience and readiness. We also asked respondents to estimate what share of their asset portfolio they were planning to retrofit. We present the findings in Table 1.[2]

As shown, between 2024 and 2025 through the first year of the Purpose Retrofit Accelerator, the proportion of survey respondents reporting deep-retrofit experience more than doubled. Similarly, the share of respondents who said they were planning to take on additional retrofit projects nearly doubled.

Table 1: Canadian decarbonization experience and readiness	2024	2025
Experience: Respondents who described themselves as "involved or very knowledgeable" of transition projects	25%	67%
Readiness: Respondents who said they intend to undertake additional transition projects.	30%	55%
Scale: Respondents estimate of the buildings in their portfolio that will have transition plans	6%	17%

[2] Presented observations summarize information shared by year one participants but also include and build upon insights gleaned from preceding surveys, as detailed in the Appendix 1.

To dive deeper on how intention is translating to concrete plans, CAGBC also asked respondents to estimate the percentage of individual buildings within their overall portfolio that they anticipate will have decarbonization plans in place by the end of 2026.

This suggests that Canada's building owners and portfolio managers are growing more confident, comfortable, and committed to decarbonization — a necessary shift if we are to ensure all buildings get transition plans.

The CAGBC also surveyed retrofit barriers and opportunities across the four themes that it has been using to define the Canada's retrofit ecosystem: financial; technology; workforce and collaboration; and regulations, policy and programs.

From a **financial** perspective, 44 percent of respondents believed financial conditions degraded over the past year, with upfront costs (79%) and long payback periods (58%) continuing to be cited as the top barriers. While a direct year-over-year comparison is not available for this indicator, these findings reinforce the financial challenges identified in the 2024 market sounding.

The **policy** landscape also remains an area of concern with no perceived progress; 67 percent of respondents flagged fragmented policies as a significant barrier, up from 65 percent in 2024.

Technology fared better, with 46 percent seeing affordability of new or existing technologies improve; this is encouraging, even if 62 percent report persistent technology integration struggles.

For a deeper dive into the CAGBC's recent market-sounding research, please access the full study, Rapidly Scaling Canada's Deep Retrofit Market, at retrofitsnow.ca

Initial Retrofit Database Trends & Insights

Seventeen hundred buildings are currently participating in the Purpose Retrofit Accelerator. Taken together, those assets represent 38 million square meters of gross floor area, with potential to reduce emissions by hundreds of thousands of tonnes annually.

Of those participants, owners have completed transition plans for 380 buildings to-date, and 26 deep retrofits are currently in some stage of design or construction.

The Accelerator validated an inaugural dataset of 16 properties and 135 retrofits — a portion of those that have completed a planning phase — and identified a series of notable findings and trends. A caveat: The owners of buildings in the inaugural dataset had already prioritized them for decarbonization prior to the Purpose Retrofit Accelerator. As such, they may not represent "average" Canadian buildings.

Nonetheless, these high-level observations help demonstrate what's possible when committed owners and portfolio managers apply a clear and proven methodology to energy and carbon retrofit projects at prioritized assets.

Insight #1: Retrofits are happening — and must accelerate

- If fully implemented, the transition plans captured in the inaugural dataset would yield about a 40 percent reduction in GHG emissions by 2030 while putting the buildings on track to fully decarbonize by 2050.
- While significant, those reductions will still fall short of the global need. For example, the Science Based Targets initiative (SBTi) concludes that the global buildings sector must reduce operational emissions by roughly 50 percent by 2030 and reach net-zero by 2050 to remain aligned with a 1.5°C pathway.[3]
- If Canada's building sector is to do its part, owners will need to follow through on their plans, drive deeper retrofits at each individual building, and extend similar action across entire portfolios — not just the small group of properties in the inaugural dataset.
- The industry needs to support moving these plans through design and construction to get across the finish line.
- Though many transition plans align deep retrofits with existing equipment renewal cycles — improving affordability — financial conditions remain challenging. As noted earlier, 44 percent of industry survey participants reported conditions worsened from 2024 to 2025.
- The industry needs to help unlock affordability to deliver more deep retrofits. This includes increasing available incentives and establishing valuation and business case language to communicate asset performance in transactions — such as lending, insuring, leasing, and acquisition.

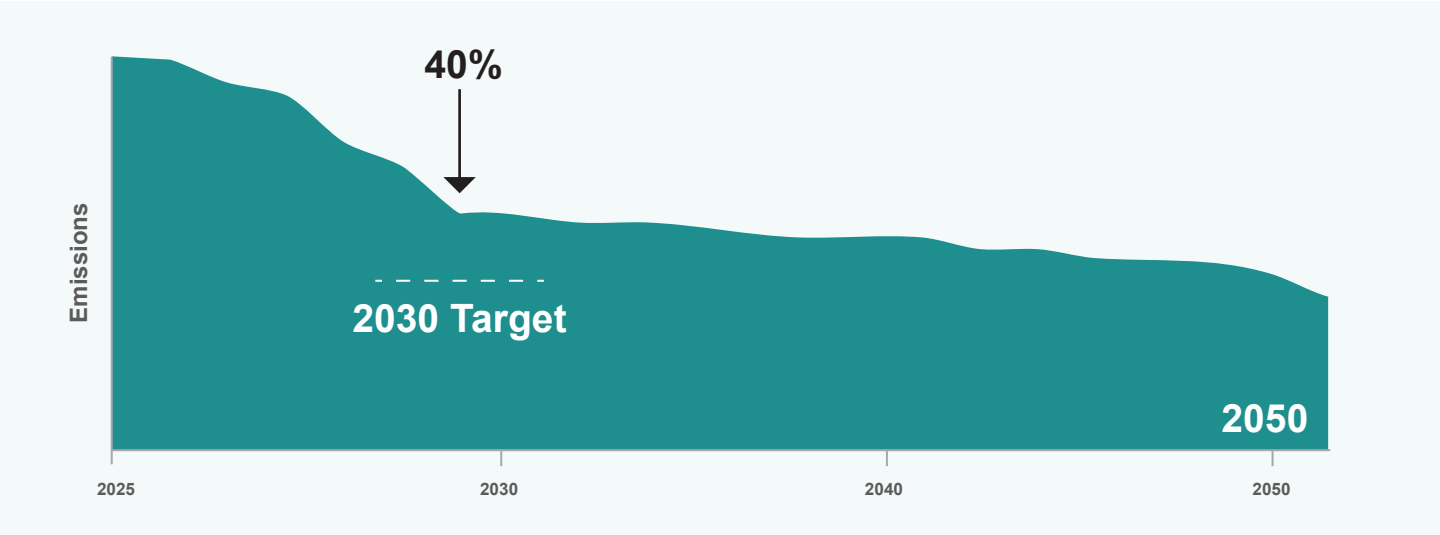


Figure 2: Projected outcome of implementing deep retrofit plans in the Purpose Retrofit Accelerator inaugural dataset.

[3] Science Based Targets initiative. 2025. Buildings Sector Science-Based Target-Setting Criteria v1.1. https://files.sciencebasedtargets.org/production/files/SBTi-Buildings-Criteria.pdf.

Insight #2: Cost transparency can spur action

- Decarbonization can't be — and isn't — a blank cheque. A lack of cost benchmarks may be holding back innovation, and transparency on deep retrofit costs can help drive action.
- Our inaugural dataset suggests an average incremental cost of $10 per square foot may be needed to reduce GHG emissions 40 percent by 2030 (Figure 3) while getting on a path to net zero by 2050. However, we emphasize this figure is preliminary and based on a relatively modest pool of retrofits. We share it here with the hope that it will spark discussion, innovation, and collaboration across the sector.
- As we expand our analysis, we are also seeking market input. Would greater cost transparency help you collaborate as a tenant, landlord, lender, underwriter, or otherwise? Please let us know what data trends and benchmarks could help via **info@purposebuilding.ca**

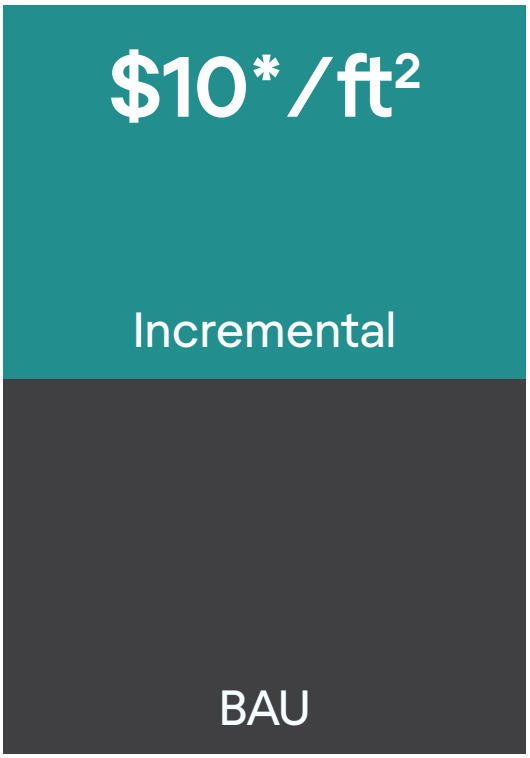
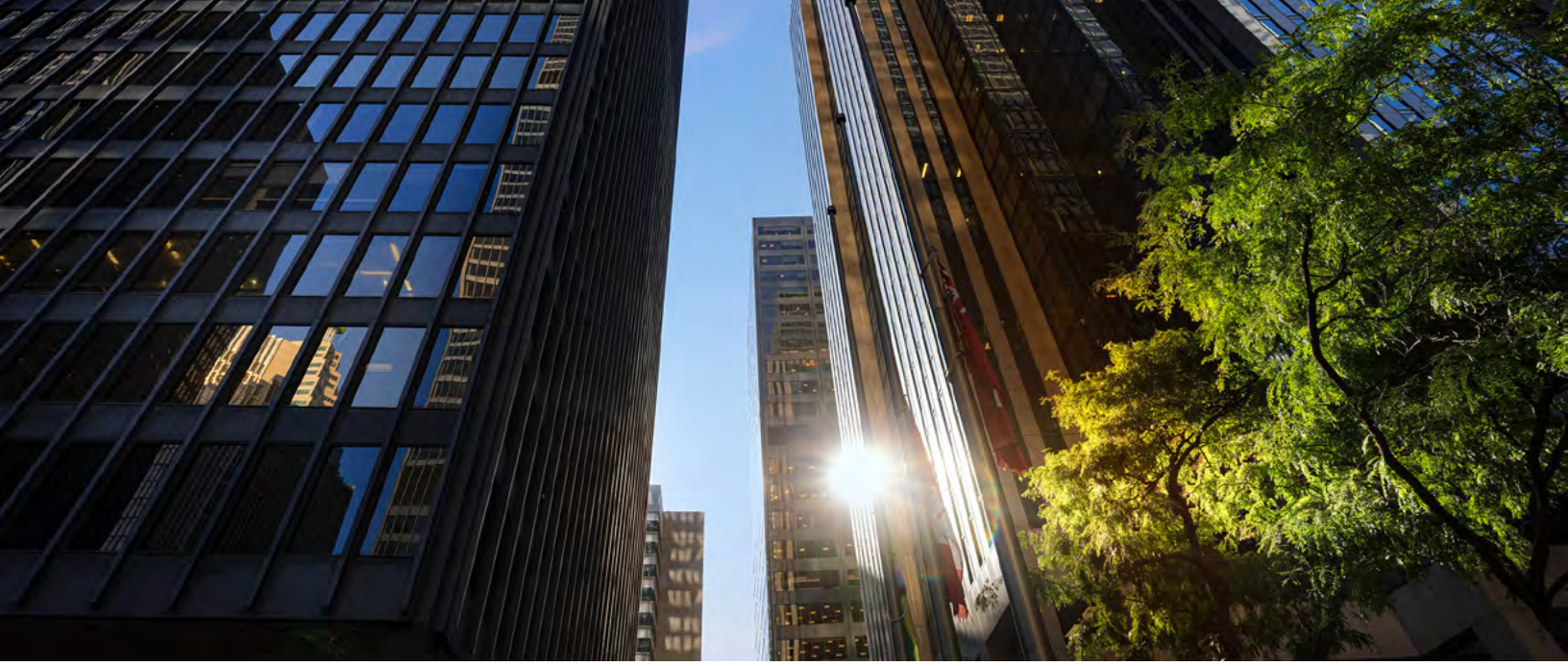


Figure 3: Deep retrofit incremental cost to reach 40 percent reduction by 2030 on a path to net zero by 2050 (preliminary – inaugural dataset average)



Insight #3: Shallow measures won't get us where we need to go

- A cumulative marginal abatement cost curve (See Figure 4) from the inaugural dataset unsurprisingly reveals that higher emissions require a higher marginal cost to mitigate.
- Implementing all retrofits in the inaugural dataset would not be enough for those buildings to halve emissions by 2030 and get on a path to net zero by 2050 as per the Science Based Targets recommendation.
- If building owners limit action to pursuing only relatively "shallow" retrofits, the industry will not reduce emissions at the scope, scale, and speed needed to address the climate challenge.
- Retrofit planning — as well as incentives, policy, and technology innovation — should seek to increase the appeal and affordability of higher-impact retrofits.

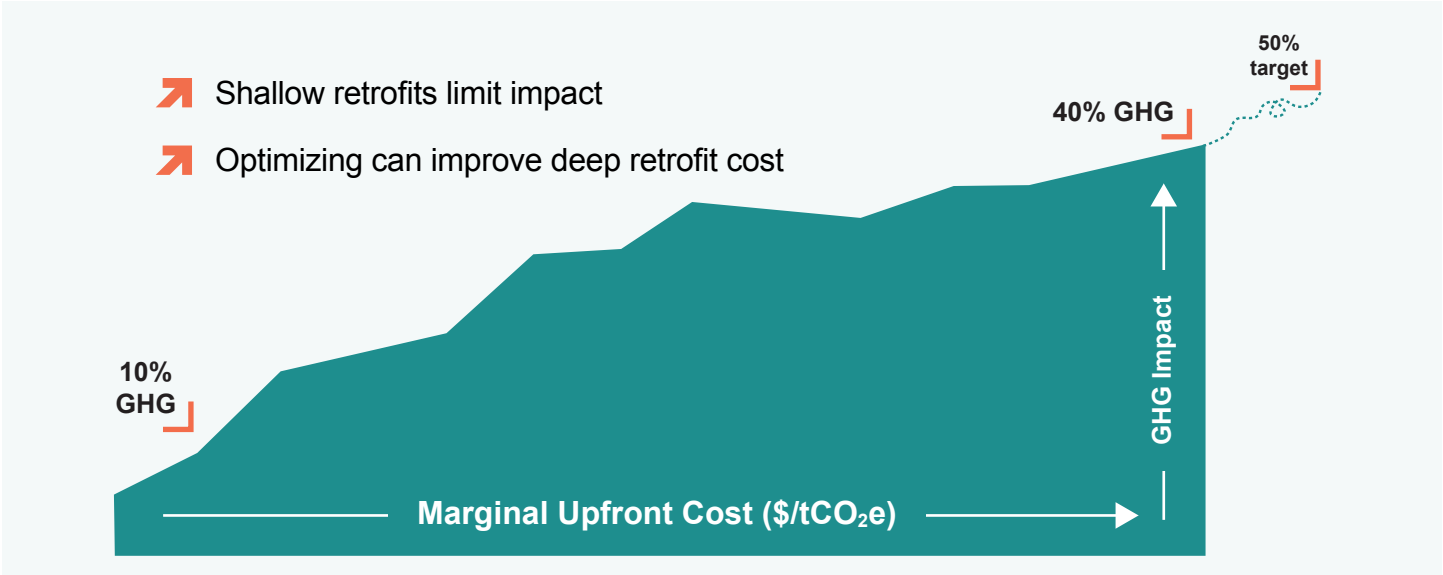


Figure 4: Cumulative marginal abatement cost curve (inaugural dataset).

Insight #4: Sustainability supports affordability

- Some decision-makers currently measure a building's "affordability" by construction cost. Yet affordability encompasses much more – including expenses for capital projects, operations, and financing.
- Emissions-intensive and energy-intensive buildings increasingly face higher and more volatile costs which decrease their resilience and affordability over time. Examples include costs of utilities, insurance premiums, mitigating risks or repairing disaster damage, retaining tenants or attracting new ones.
- Like-for-like renovations rarely yield more affordable, high-performance outcomes. In contrast, Purpose Retrofit Accelerator participants are guided through a process of testing, refining, and integrating innovations in design, construction, and financing. Together, these efforts are improving affordability through lower capital costs, reduced energy and operating expenses, and improved access to financing.

What they're saying:

> "Crown has been proactively developing deep retrofit strategies across our portfolio to ensure we're ready to act, not react when investors, tenants, and regulators demand it. The Purpose Accelerator has helped translate our readiness into actionable steps by guiding us through a complex process. By aligning our capital plans with practical, asset-specific strategies, we've been able to move forward with clarity despite the market noise."

— Emily Hanna
Managing Partner, Crown Realty Partners

$$\textit{Affordability} = \sum_{\textit{Life}} \textit{CapEx, OpEx, Finance.}$$

Figure 5: Affordability as a life cycle equation (CapEx + OpEx + Finance)

Conclusion

A clearer picture is emerging from the Purpose Retrofit Accelerator's first year: the market for deep energy and carbon retrofits is evolving and gaining definition. Stakeholders are building capacity, zero-carbon equipment is becoming more available and affordable, and a shared understanding is forming around the solutions that deliver results — even as significant challenges persist.

Affordability is shaped by capital, operating, and financing costs — each of which evolves over time. Participants recognize that high-carbon, high-energy buildings will carry rising costs and risks, while like-for-like replacements extend those liabilities. The Purpose Retrofit Accelerator is demonstrating that a structured retrofit process helps owners turn these pressures into opportunities to enhance value, resilience, and performance.

At the same time, the broader ecosystem must continue to evolve. Financial institutions, appraisers, and other market actors need to account for the tangible advantages of efficient, low-carbon buildings. A credible business case now demands a more complete accounting — one that captures not only costs, but the full range of benefits deep retrofits deliver: access to incentives and green finance, lower operating expenses, reduced regulatory and reputational risk, stronger asset positioning, improved tenant retention, and greater access to global capital.

Streamlined incentives, preferential financing, and consistent post-retrofit valuation can all strengthen this case. Today, market valuations often lag performance, underestimating the true gains in efficiency, comfort, and resilience that high-performing buildings achieve.

The sector need not wait for ideal conditions. Owners, managers, and investors are finding ways to make some retrofits work now despite higher upfront costs. The Purpose Retrofit Accelerator is helping the market accelerate with tested processes, transparent cost benchmarks, and practical lessons. These insights are beginning to align the perspectives of owners, tenants, lenders, and policymakers around a more coordinated path to decarbonization.

Future reports will continue to share findings, document progress, and reflect the growing momentum of Canada's retrofit market.

Next steps

The Purpose Retrofit Accelerator is now in its second year, building momentum across Canada's private sector retrofit market in partnership with the CAGBC. Building on recent insights, the program is focused on accelerating participation, expanding practical resources, and supporting owners as they move from planning to implementation.

Over the coming months, participants can:

- Access emerging resources available through **retrofitsnow.ca**, including new research, screening tools, and upcoming case studies.
- Join upcoming live and virtual events, webinars, and industry discussions designed to share lessons learned and advance market-ready solutions.
- Engage directly with the Accelerator team to accelerate assets, access funding opportunities while support is available, and receive guidance at any stage of the deep retrofit journey.
- Collaborate with Purpose by co-developing tools and resources that respond to real industry needs, or by supporting the initiative through sponsorship opportunities.

We welcome building owners and managers to join the program. Wherever you find yourself in your deep retrofit journey, reach out to our team via **info@purposebuilding.ca**

Appendix 1: Methodology

To produce this report, the project team analyzed aggregated performance and costing data from an inaugural dataset of 16 properties and 135 retrofits participating in the Purpose Retrofit Accelerator.

To understand industry views on deep retrofit readiness, ambition, and awareness, CAGBC twice surveyed the cohort of participating property owners and portfolio managers, and engaged with a wider network of designers, builders, manufacturers, and operators, as detailed below.

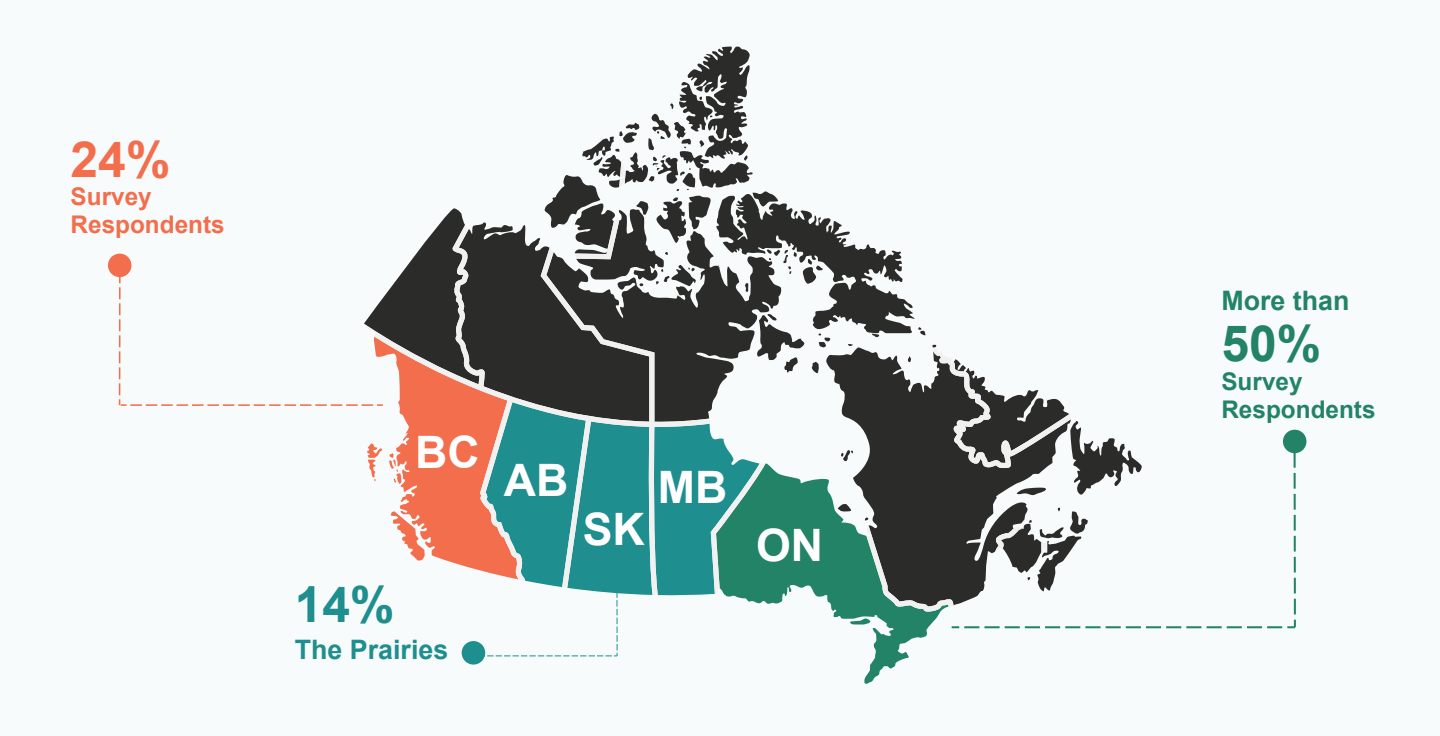


Figure 6: Geographic distribution on the survey participants

The geographical distribution of participants (see inset map) reflects the concentration of large property owners and management firms in the Greater Toronto Area and Metro Vancouver but also highlights opportunities to reach out to central, northern, and eastern Canadian markets, which face unique building decarbonization challenges.

The first year one survey had broader geographical representation from the Prairies and the Maritimes as well as some participation from the Territories.

Most respondents in the year one surveys self-identified as consultants (62%), building owners (28%) and contractors (10%). Contractor participation increased from six percent to 10 percent in Year One, reflecting the shift from planning toward implementation.

To engage the industry, CAGBC coordinated in-person sessions, webinars, and separate surveys to educate industry professionals, assess readiness, and gather feedback from the field.

These activities included:

- An initial survey Conducted via four market-sounding sessions. For results, see CAGBC's report, ***Rapidly Scaling Canada's Deep Retrofit Market: Stakeholder Insights into Barriers and Opportunities.***

- A second survey, conducted at the end of year one, captured responses from 90 participants including building owners, CAGBC Accelerator members, and those who attended the initial session.

All the above surveys and activities informed this report. Both CAGBC and Purpose will continue to survey participants and enrich the findings for future iterations of this annual report.

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